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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,592	10/01/2001	Akinobu Nakabo	O3020.0269/P269	4001

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EXAMINER

PAIK, STEVE S

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/966,592

Applicant(s)

NAKABO, AKINOBU

Examiner

Steven S. Paik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of the Amendment filed May 16, 2003.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ieda (US 5,847,371).

Re claims 1-4 and 11, Ieda discloses an IC contact unit (1 in Fig. 1), comprising:

an actuator (solenoid 4 in Fig. 1 serving as an actuator) including a movable plunger (plunger 4a in col. 6, ll.1-4);

a depressing member (discharge-detecting member 3 having a vertical portion and a horizontal portion) pivotably movable in relation (col. 5, ll. 44-54) to said plunger (4a)

a movable support (card holding member 5 and a contact holding plate 6) including an IC contact point (6a) and a pawl member (5d), said movable support (the movable support has guide holes 13 and 14 guiding the movement of the movable support) being movable by said depressing member (3), said pawl member (5d) being movable by said depressing member (3) between a first position (reading position) in which it projects to a card transfer line and a second position (discharging position) in which it retreats upward from said card transfer line (A) and

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wherein the force of an IC card (40) moved into contact with said pawl member (5d) moves said movable support (card holding member 5 and a contact holding plate 6) such that said IC contact point (6a) contacts with the IC card (40). Figures 1-64 and 15-17 disclose a contact unit (1) of an IC card reader including the recited elements of the claimed invention. The transport mechanism comprises a motor and shafts coupled to move an IC card (40) within a guided transport direction (A), a feed roller (21) to guide and depress the IC card (40) within a card travel path along the transport direction. The contact unit further comprises a movable support (card holding member 5 and a contact holding plate 6) having an IC contact probe (6a) and a pawl member (5d), which are movable by the transport mechanism through guide rods (66) and a link. The guide rods supports a sliding motion of the IC card traveling in the transport direction. Ieda further teaches and fairly suggests the contact unit including a guide portion (12 and 13) having a front guide holes and a back guide holes in Figs. 1 and 2.

Re claim 5, the contact unit disclosed by Ieda as recited in rejected claim 4 stated above, where the front guide (13 in Fig. 4) holes comprise a horizontal portion, a slant portion, and a vertical portion (the card holding member 5 comprise a horizontal portion, a slant portion, and a vertical portion).

Re claim 8, the contact unit disclosed by Ieda as recited in rejected claim 4 stated above, comprising urging means (71) which exerts a bias in a direction away from the card transfer line (A or X) on said movable support (card holding member 5 and a contact holding plate 6).

Re claim 9, the contact unit disclosed by Ieda as recited in rejected claim 8 stated above, wherein said urging means (71) comprises a spring (col. 2, ll. 12-22) attached to said unit main body and said guide member.

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Re claim 10, the contact unit disclosed by Ieda as recited in rejected claim 1 stated above, wherein said urging plunger (4a) comprises a transversely directed pin (col. 6, ll. 1-2) about which said depressing member (3) is pivotably movable.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ieda (US 5,847,371) in view of Yasuma et al. (US 4,839,509).

Re claims 12-14, and 18, Ieda discloses an IC contact unit and a method of reading an IC card comprising:

an actuator (solenoid 4 in Fig. 1 serving as an actuator) including a movable plunger (plunger 4a in col. 6, ll.1-4);

a depressing member (discharge-detecting member 3 having a vertical portion and a horizontal portion) pivotably movable in relation (col. 5, ll. 44-54) to said plunger (4a)

a movable support (card holding member 5 and a contact holding plate 6) including an IC contact point (6a) and a pawl member (5d), said movable support (the movable support has guide holes 13 and 14 guiding the movement of the movable support) being movable by said depressing member (3), said pawl member (5d) being movable by said depressing member (3)

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between a first position (reading position) in which it projects to a card transfer line and a second position (discharging position) in which it retreats upward from said card transfer line (A) and

wherein the force of an IC card (40) moved into contact with said pawl member (5d) moves said movable support (card holding member 5 and a contact holding plate 6) such that said IC contact point (6a) contacts with the IC card (40).

However, Ieda does not specifically disclose transfer rollers as a part of transport mechanism.

Yasuma et al. disclose an IC card reader having the recited elements of the claimed invention in figures 1-6 and 11-16. The transport mechanism comprises a motor and shafts coupled to move an IC card within a guided transport direction (X), a feed roller (21) to guide and depress the IC card (K) within a card travel path along the transport direction. The contact unit further comprises a movable support (31-33) having an IC contact probe (62) and a pawl member (92), which are movable by the transport mechanism through guide rods (50) and a link. The guide rods supports a sliding motion of the IC card traveling in the transport direction. Yasuma et al. further teaches or fairly suggests the contact unit including a guide portion (31a and 32b) having a front guide holes and a back guide holes in Fig. 12.

In view of Yasuma et al., it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further employ a transport mechanism in addition to the IC card unit of Ieda due to the fact that a card can be efficiently transferred along a card traveling path via the transfer rollers for the purposes of guiding and depressing the IC card within the reader. Furthermore, such modification of employing a transfer roller to the IC card unit of Ieda

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would have been an obvious matter of design variation, well within the ordinary skill in the art, and therefore an obvious expedient.

Re claim 15, Ieda in view of Yasuma discloses the IC card reader as recited in rejected claim 14 stated above, where the front guide (31a in Fig. 12) holes comprise a horizontal portion, a slant portion, and a vertical portion (bottom portion of the figure 12).

Re claim 16, Ieda in view of Yasuma discloses the IC card reader as recited in rejected claim 13 stated above, comprising urging means (71) which exerts a bias in a direction away from the card transfer line (A or X) on said movable support (card holding member 5 and a contact holding plate 6), where said urging means (71) comprises a spring (71) attached to said unit main body and said guide member.

Re claim 17 Ieda in view of Yasuma discloses the IC card reader as recited in rejected claim 12 stated above, wherein said urging plunger (4a) comprises a transversely directed pin (col. 6, ll. 1-2) about which said depressing member (3) is pivotably movable.

Re claim 19, Ieda in view of Yasuma discloses the IC card reader and method of using the reader as recited in rejected claim 18 stated above, where the moving step comprises translating rotational movement of a plurality of transfer rollers (21 and 22 in Yasuma reference) to the IC card (K) along the card transfer line (40).

Re claim 20, Ieda in view of Yasuma discloses the IC card reader and method of using the reader as recited in rejected claim 19 stated above, further comprising guiding the movement of the movable support (card holding member 5 and a contact holding plate 6 rotated via holes and axes 13 and 14).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ieda (US 5,847,371) in view of Owa (US 5,917,177 cited by the applicant).

As stated above, Ieda teaches, a contact unit of an IC card reader including the recited elements of the claimed invention in figures 1-6 and 15-17. The teachings of Ieda have been discussed above.

However, Ieda does not specifically disclose or fairly suggest the back guide holes having a horizontal portion, a slant portion and a pair of shafts.

Owa discloses an IC card reader comprising a guide portion (24) having a horizontal portion; a slant portion (24 in Fig. 1) and a pair of shafts (23 and 25 in Fig. 4) to properly support the transporting path of an IC card. It would have been an obvious design variation to manufacture an IC card having different shapes of a transport path-guiding element.

In view of Owa reference, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to design a transport path guide portion in an IC card reader having a horizontal and a slant portion in addition to the guide portion of Ieda since both provides the same function of guiding a transport path.

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Response to Arguments

8. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

The applicant amended independent claims to further limiting the claimed invention. A newly cited reference, Ieda (US 5,847,371) in view of Yasuma et al. (US 4,839,509) discloses, teaches or fairly suggests the claimed invention. Therefore, claims 1-20 are rejected under 35 U.S.C. § 102 (b) and 103 (a).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 703-308-6190. The examiner can normally be reached on Mon - Fri (7:00am-3:30pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.

Steven Paik

Steven S. Paik
Examiner
Art Unit 2876

ssp
July 16, 2003


MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
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